

SPECIFICATION

TITLE:

“EnsoBox: An Internet Services Provider Appliance that enables an operator thereof to offer a full range of internet services”

CROSS-REFERENCE TO RELATED APPLICATIONS

Not Applicable

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM LISTING COMPACT DISK APPENDIX

Not Applicable

BACKGROUND OF THE INVENTION

TECHNICAL FIELD OF INVENTION:

The ensoBox™ is an ISP appliance technology that enables the complete technology required for an Internet Service Provider (ISP). Currently, in the build out of an ISP operation it is necessary to build requirements, analyze, design, implement, test and roll out equipment and software into a production environment. This ISP appliance technology is completely turnkey and as a result can be deployed without the standard software/hardware life-cycle. This technology provides everything that an ISP needs to begin operating an ISP business within 90 days. Simply put, ISPs now have the ability to plug in telco, power, backbone, and flip a switch and they can start operating a successful ISP business.

There are some terms and definitions required in order to understand the technical aspects of this design. They are as follows:

Terms and Definitions

AAA – Authentication, Authorization, Accounting.

Analog Service – Plain Old Telephone Service (POTS).

APOP – Authenticated Post Office Protocol.

5 **Appliance** – integration of hardware and software into a single platform that offers a specific functionality. An appliance is typically configured with a proprietary operating system.

BRI – Basic Rate Interface.

CFEP – Core Front End Processor.

CHAP – Challenge Handshake Authentication Protocol.

10 **CIDR** – Classless Inter Domain Routing.

CLI – Command Line Interface.

COTS – Commercial Off The Shelf.

CSA – Clustered Services Architecture.

DHCP – Dynamic Host Configuration Protocol.

DIMM – Dual In-line Memory Module.

DNS – Domain Name Service.

DRAM – Dynamic Random Access Memory.

E-1 Service – provides digital transmission rates of 2.048 Mbps. It consists of 30 64 Kbps data channels and 2 64 Kbps control channels.

ensoBox™ – an ISP appliance that offers direct connectivity to the Internet, dial-up connectivity to the Internet, and a suite of end user services including a web portal, email, chat, news, video conferencing, and anonymous FTP.

ensoOS™ – the backend software infrastructure for the ensoBox™. A suite of management tools used by both ensoport.com™ headquarters and franchises for managing ensoBox™ franchises and ensoBox™ subscriber accounts.

ESMTP – Encrypted Simple Mail Transfer Protocol.

FEP – Front End Processor.

Flash Memory – used to store operating system images such as Cisco's IOS.

FT-1 – Fractional T-1 Service. N X 64 Kbps, where N = 1 to 24.

30 **FTP** – File Transfer Protocol.

H.323 – the name given to a set of communications protocols used by programs such as Microsoft NetMeeting to transmit audio and video information over the Internet.

HTML – Hyper Text Markup Language.

HTTP – Hyper Text Transfer Protocol.

35 **HTTPS** – Hyper Text Transfer Protocol Secure.

IMAP – Internet Message Access Protocol.

IRCD – Internet Relay Chat Daemon.

ISDN – Integrated Services Digital Network.

ISP – Internet Services Provider.

ISP Franchise – an entity that utilizes the ensoBox™ ISP appliance to support an ISP business ISP in any region of the world.

5 **LAN** – Local Area Network.

LDAP – Lightweight Directory Access Protocol.

NAS – Network Attached Server.

NNTP – Network News Transfer Protocol.

NOC – Network Operations Center.

10 **NTP** – Network Time Protocol.

PAP – Password Authentication Protocol.

POP3 – Post Office Protocol 3.

POTS – Plain Old Telephone Service.

PPP – Point-to-Point Protocol.

15 **PRI** – ISDN Primary Rate Interface. It consists of twenty-three (23) 64 Kbps data channels and one (1) 64 Kbps control channel.

PSTN – Public Switched Telephone Network.

RADIUS – Remote Authentication Dial-In User Service.

RAS – Remote Access Server.

20 **SFEP** – Services Front End Processor.

SIMM – Single In-line Memory Module.

SLIP – Serial Line Interface Protocol.

SMTP – Simple Mail Transfer Protocol.

SNMP – Simple Network Management Protocol.

25 **SRAM** – Static Random Access Memory.

SSL – Secure Socket Layer.

Subscriber – an ensoport.com™ franchise customer (remote end user).

T-1 Service – provides digital transmission rates of 1.544 Mbps. It consists of twenty-four (24) 64 Kbps data channels plus 8 Kbps of control bits.

30 **TFTP** – Trivial File Transfer Protocol.

URL – Universal Resource Locator.

UPS – Uninterruptible Power Supply.

VPN – Virtual Private Network.

WAN – Wide Area Network.

35 **WCCP** – Web Cache Communication Protocol.

WIC – WAN Interface Card.

XML – extensible Markup Language.